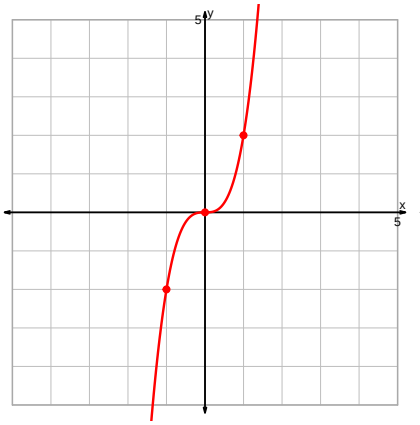
NAME: DATE:

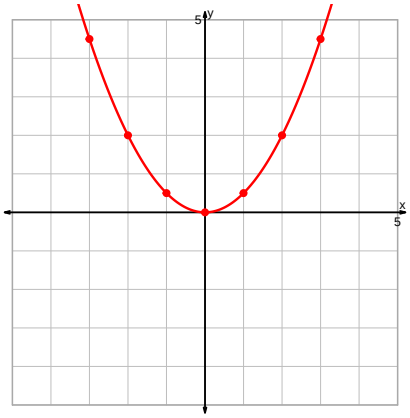
# Unit-2 Reduced Mastery Assessment (version 308)

**Question 1 (20 points)**

Graph the equations accurately. For each integer-integer point on the parent, indicate the corresponding point precisely. Also, with dashed lines, indicate any asymptotes.

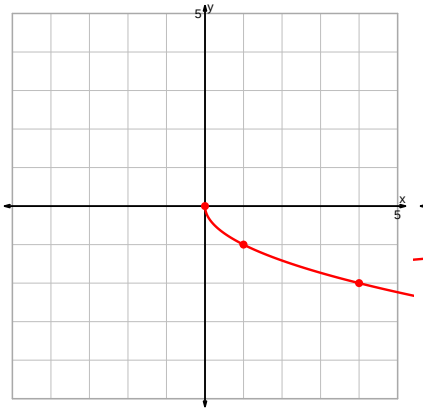
$y = 2 \cdot x^3$

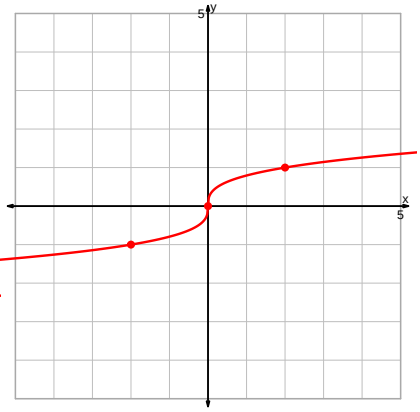



$y = \frac{x^2}{2}$

$y = -\sqrt{x}$

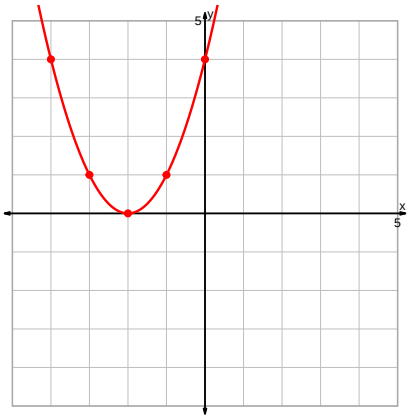


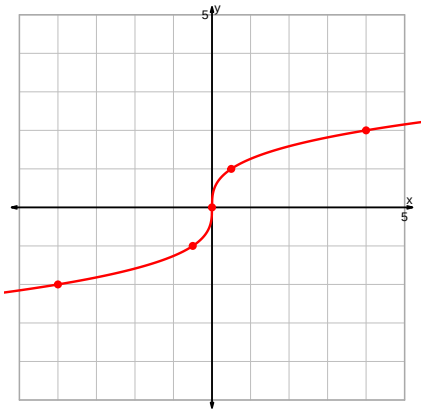




$y = \sqrt[3]{\frac{x}{2}}$

**Question 2 continued. . .**

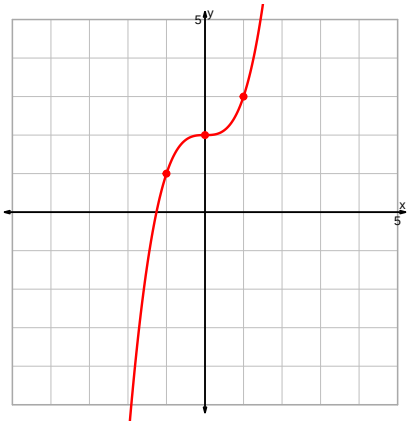
$y = (x+2)^2$

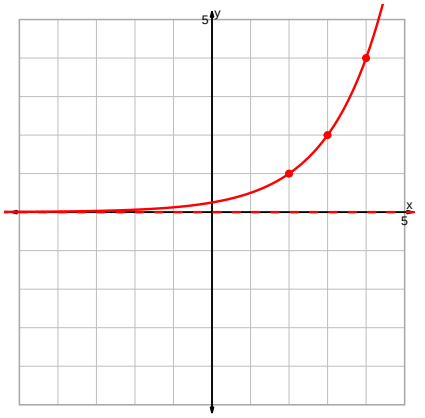



$y = \sqrt[3]{2x}$

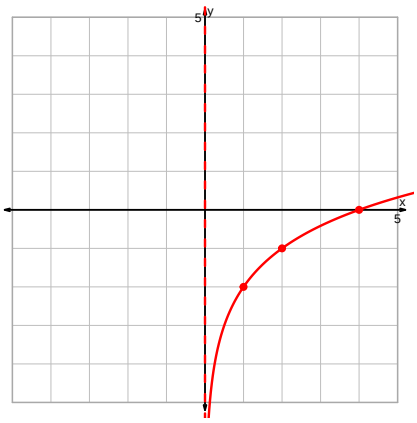
$y = x^3 + 2$

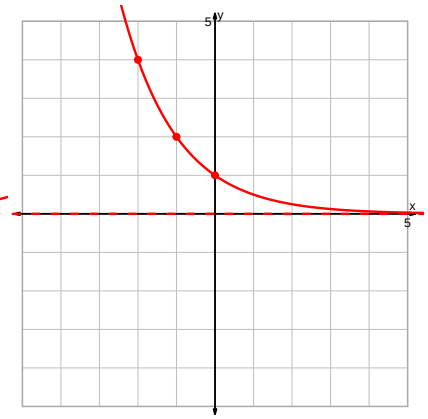



$y = 2^{x-2}$

$y = \log_2(x) - 2$

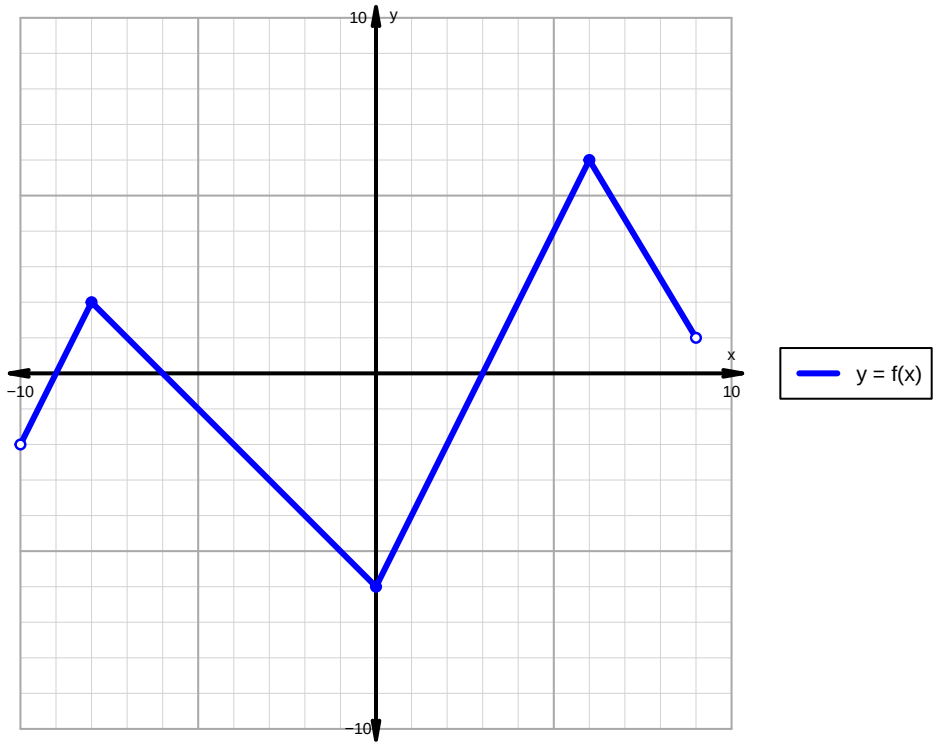



$y = 2^{-x}$

**Question 2 (20 points)**

A function is graphed below.




Indicate the following intervals using interval notation.

| Feature | Where |
|---|---|
| Positive | $(-9,-6)\cup(3,9)$ |
| Negative | $(-10,-9)\cup(-6,3)$ |
| Increasing | $(-10,-8)\cup(0,6)$ |
| Decreasing | $(-8,0)\cup(6,9)$ |
| Domain | $(-10,9)$ |
| Range | $(-6,6)$ |